

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for identifying a fault associated with an individual cylinder of a multicylinder combustion engine ~~[[1]]~~,
comprising the steps of:
supplying a fuel supply to all of the cylinders of the engine and accelerating the combustion engine ~~[[1]]~~ to a first engine speed (L1);
when the first engine speed (L1) is reached, interrupting the fuel supply to all cylinders except the individual cylinder, while supplying the individual cylinder with a predetermined amount of fuel supply, ~~when the first engine speed (L1) is reached;~~ and
counting the time it takes for the speed of the combustion engine ~~[[1]]~~ to decrease from either the first engine speed (L1) or a second engine speed (L2), which is lower than the first engine speed (L1), down to a third engine speed (L3).
2. (Currently Amended) A method according to claim 1, ~~comprising~~ wherein the step of supplying a fuel supply to all of the cylinders comprises supplying a substantially equal ~~first~~ amount of fuel to all cylinders ~~[[2a-2d]]~~ during the step of accelerating the combustion engine ~~[[1]]~~.
3. (Currently Amended) A method according to claim 1 ~~or 2, which~~ wherein after the third engine speed (L3) has been reached, the method further comprises ~~the step of~~ interrupting the fuel supply to the individual cylinder.
4. (Currently Amended) A method according to ~~any one of claims 1-3~~ claim 1, further comprising the step of keeping the speed of the combustion engine ~~[[1]]~~ at a substantially constant ~~low speed (L0), which is~~ lower than the third engine speed (L3), ~~before~~ and repeating

the method ~~is repeated~~ for identifying a fault associated with one of ~~testing~~ the individual ~~cylinder again or another of the cylinders (2a-2d)~~ cylinders of the combustion engine ~~[[1]]~~.

5. (Currently Amended) A method according to ~~any one of the preceding claims~~ claim 1, further comprising the step of comparing the counted time with a predetermined time representing a deceleration time for a well-functioning one of the cylinders ~~cylinder~~.

6. (Currently Amended) A method according to ~~any one of the preceding claims~~ claim 1, wherein the combustion engine ~~[[1]]~~ is a diesel engine in a vehicle.

7.-12. (Canceled)

13. (New) A method for identifying a fault associated with an individual cylinder of a multicylinder combustion engine,

comprising the steps of:

supplying a fuel supply to all of the cylinders of the engine and accelerating the combustion engine to a first engine speed (L1);

when the first engine speed (L1) is reached, interrupting the fuel supply to all cylinders except the individual cylinder, while supplying the individual cylinder with a predetermined amount of fuel supply wherein the engine speed decreases to a second engine speed; and

counting the time it takes for the speed of the combustion engine to decrease from an engine speed above the second engine speed, down to the second engine speed.

14. (New) A software application operable on at least one of an engine control unit and a computer connected to the engine control unit, wherein the software application identifies a fault associated with an individual cylinder of a multicylinder combustion engine and comprises:

first program code that instructs the engine control unit to cause a fuel supply to all cylinders in the multicylinder combustion engine to accelerate the combustion engine to a first engine speed;

second program code that instructs the engine control unit after the first engine speed is reached to cause an interruption of fuel supply to all cylinders in the multicylinder engine except the individual cylinder, wherein the engine speed decreases to a second engine speed as a function of the fuel supply being interrupted and the software application is operable to identify the fault associated with the individual cylinder based on a determinable time counted while the speed of the engine decreases to the second engine speed.

15. (New) The software application of claim 14, wherein the time is counted by third program code.

16. (New) The software application of claim 14, wherein the time is counted by the engine control unit or the computer connected to the engine control unit.

17. (New) The software application of claim 14, further comprising a graphical user interface operable on a display, and fourth program code for causing the control unit or the computer to display the interface.

18. (New) The software application of claim 14, wherein the software application stores in a memory at least one criterion for testing the individual cylinder and the application further comprising fourth program code that checks whether all of the at least one criterion for testing the individual cylinder is fulfilled.

19. (New) The software application of claim 14, wherein the software application stores in a memory a time value, and further comprises fourth program code that compares the time value with the time counted by the third program code.

20. (New) The software application of claim 14, wherein the software application is stored on a computer readable medium.

21. (New) The software application of claim 14, wherein the third program code counts the time during which the speed of the engine operating at either the first engine speed or a third engine speed below the first engine speed decreases to the second engine speed.

22. (New) A computing device that identifies a fault associated with an individual cylinder of a multicylinder combustion engine and comprises:

a memory which stores a software application that comprises:

first program code that instruct an engine control unit to supply fuel to all cylinders in the multicylinder combustion engine and to accelerate the combustion engine to a first engine speed;

second program code that instruct the engine control unit after the first engine speed is reached to interrupt supplying fuel to all cylinders in the multicylinder engine except the individual cylinder, wherein the engine speed decreases to a second engine speed as a function of the fuel supply being interrupted and the computing device is operable to identify the fault associated with the individual cylinder based on a determinable time counted while the speed of the engine decreases to the second engine speed.

23. (New) The computing device of claim 22, wherein third program code counts the time during which the speed of the engine decreases to the second engine speed.

24. (New) The computing device of claim 22, wherein the engine control unit or a computer counts the time during which the speed of the engine decreases to the second engine speed.

25. (New) The computing device of claim 22, wherein the device is at least one of an engine control unit and a computer connected to the engine control unit.

26. (New) The computing device of claim 22, wherein the third program code counts the time during which the speed of the engine operating at either the first engine speed or a third engine below the first engine speed decreases to the second engine speed.